Serial Number: 10/625,137

Page 2 of 6

Please enter the following as the claims in this case:

1 (currently amended). An isolated nucleic acid selected from the group consisting of

a nucleic acid encoding erythropoietin receptor isoform 1 and having the sequence given herein as **SEQ ID NO: 4**; and

a nucleic acid encoding erythropoietin receptor isoform 2 and having the sequence given herein as SEQ ID NO: 6;

a nucleic acid encoding erythrropoietin receptor isoform 3 and having the sequence given herein as SEQ ID NO: 8;

a nucleic acid encoding erythropoietin receptor isoform 4 and having the sequence given herein as **SEQ ID NO: 10**;

a nucleic acid encoding erythropoietin receptor isoform 5 and having the sequence given herein as **SEQ ID NO: 12**;

a nucleic acid that is the full length complement of SEQ ID NO: 4encodes the opposite strand of a nucleic acid as set forth above.

2 (original). The nucleic acid according to claim 1 encoding erythropoietin receptor isoform 1 and having the sequence given herein as **SEQ ID NO: 4**.

3-6 (cancelled)

7 (original). The nucleic acid according to claim 1, wherein said nucleic acid is an RNA.

8 (original). A recombinant nucleic acid comprising a promoter operatively associated with a nucleic acid according to claim 1.

9 (currently amended). An isolated host cell in culture containing a recombinant nucleic acid according to claim 8 and which expresses the encoded erythropoetin receptor

Serial Number: 10/625,137

Page 3 of 6

isoform.

10-16(cancelled).

17 (original). A method of screening a subject for cancer, comprising:

detecting the presence or absence of a nucleic acid according to claim 1 in said subject,

the presence of such a nucleic acid indicating said subject is afflicted with or at risk of developing cancer.

18 (original). The method according to claim 17, wherein said cancer is breast, cervix, colon, lung, ovarian or prostate cancer.

19 (original). The method according to claim 17, wherein said detecting step is carried out by collecting a biological sample from said subject, and then detecting the presence or absence of said nucleic acid in said biological sample.

20 (original). A method of screening a subject for cancer, comprising:

detecting the presence or absence of a protein encoded by a nucleic acid according to claim 1 in said subject,

the presence of such a protein indicating said subject is afflicted with or at risk of developing cancer.

21 (original). The method according to claim 20, wherein said cancer is breast, cervix, colon, lung, ovarian or prostate cancer.

22 (original). The method according to claim 20, wherein said detecting step is carried out by collecting a biological sample from said subject, and then detecting the presence or absence of said protein in said biological sample.

Serial Number: 10/625,137

Page 4 of 6

23 (original). The method according to claim 20, wherein said detecting step is carried out by immunoassay.

24 (original). The method according to claim 20, wherein said detecting step is carried out by detecting nucleic acid that encodes said protein.